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09/890,908	01/11/2002	Mark Lucente	10244-006	9490
20583	7590	08/11/2005	EXAMINER	
JONES DAY 222 EAST 41ST ST NEW YORK, NY 10017			SPOONER, LAMONT M	
			ART UNIT	PAPER NUMBER
			2654	
DATE MAILED: 08/11/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/890,908

Applicant(s)

LUCENTE ET AL.

Examiner

Lamont M. Spooner

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 11 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Claim Objections***

1. Claims 1, 4, 5, 6, are objected to because of the following informalities:

In claim 1, line 7, "the context" has unclear issues with regards to "the first statement and the first information".

In claim 1, line 9, "the context" has unclear issues with regards to "the first statement and the first information".

In claim 4, line 4, "the parsing tokens" should probably be "the one or more parsing tokens".

In claim 4, line 4, "the context" has unclear issues with regards to "the first statement and the first information".

In claim 6, line 2, "the context" has unclear issues with regards to "the first statement and the first information".

The similar claims may contain the same issues.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1 and 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

More specifically, "optionally" being presented in each claim is vague and indefinite as to the Examiner is unsure of whether the option step is part of the claim, or if the Examiner has the option to ignore the generation a question step. The Examiner has interpreted the claim as having the option as part of the claim in order to expedite prosecution.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1, 4-20, and 22 are rejected under 35 U.S.C. 102(e) as being anticipated by Morin et al. (Morin, US 5,748,841).

As per **claims 1 and 11**, Morin teaches a human-machine communication method comprising:

a server computer comprising(Fig. 1 Dialogue server-claim 11):

receiving a first statement in a natural language from a user (Fig. 3 "Paint omega, C.3.lines 8, 9)";

generating first information based on the first statement (C.3.lines 43-51-"stored grammars", his grammars are used for "text and ... input", the Examiner interprets this

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grammar for all inputs, first or second, all inputs are associated with this grammar or information);

storing context information of at least one of the first statement and the first information (C.3.lines 11-15, Fig. 1 item 62 –his history handler as a memory bank, claim 11);

optionally generating a question to be presented to the user in the natural language based on the context information (Fig. 5-in his dialogue model his Five Top-Level Dialogue Structures and some Examples, “sys: Playing message 1” question not generated, “Are you sure” question generated);

receiving a second statement in the natural language from the user (Fig. 3-“paint it in yellow”): and

generating second information based on the second statement and the context information (C.3.lines 43-51-all input has grammars associated therewith, interpreted as second information, on the second statement).

As per **claims 4 and 13**, Morin teaches claim 1, and further teaches

generating grammatical data for the first statement (C.3.lines 43-51-“stored grammars”, his grammars are used for “text and ... input”, the Examiner interprets this grammar for all inputs, first or second, all inputs are associated with this grammar or information);

generating one or more parsing tokens based on the grammatical data (C.3.lines 55-57-the Examiner interprets parsing to generate tokens): and

storing the parsing tokens as part of the context information. (C.8.lines 8-15-stored dialogue history, context, C.10.lines 54-60-"it" as a token from context "No paint it red" in the dialogue history, as part of the context).

As per **claims 5 and 14**, Morin teaches claim 1, and further teaches adding, modifying or removing the stored parsing tokens based on the second statement (C.10.54-62-his "substituted" pronoun, Fig. 3 "Paint Omega", "Paint it yellow"-the second statement "it" following as explained).

As per **claims 6, 7, 16 and 17**, Morin teaches claim 1, and further teaches identifying linguistic structures in the second statement based on the context information (C.3.lines 34-40-dialogue of natural language including his "dialogue structure", "no in blue" as the second statement, C.54-62-linguistic structure analysis inherently in anaphoric assessment) which

identifies and antecedent to a pronoun in the second statement, (claim 7, *ibid*).

As per **claims 8 and 18**, Morin teaches claim 7, and further teaches disambiguating a homonym in the second statement (C.10.lines 66-67-"several candidates for an input"...interpreted as a homonym, the input is interpreted as a second statement, C.11.lines 10-15, the "finding out which one of the possible meanings" (disambiguation thereof), Fig. 4 "Paint alpha in red"- the Examiner interprets red being a homonym of read, past tense).

As per **claims 9 and 19**, Morin teaches claim 1, and further teaches storing and updating the context information each time a new statement in the natural language is received (C.4.lines 1-7, C.10.lines 1-25-the history interpreted as stored information).

As per **claims 10 and 20**, Morin teaches claim 1, and further teaches providing at least one of a superlative and a comparison of the first information based on the context information, wherein the first information includes a plurality of items that can be compared with each other (C.3.lines 62-67, C.3.line 67-C.4.line 1-"if the inputted expression makes sense in the dialogue context it will be interpreted..." inherently requires comparison of information with context).

As per **claim 12**, Morin teaches claim 11, and further teaches a client computer configured to receive a plurality of statements from the user and configured to forward the received plurality of statements to the server computer (Fig. 3-, C.5.lines 34-56-his dialogue server, Fig. 1-client computer and server).

As per **claim 15**, Morin teaches claim 13, and further teaches generating the plurality of parsing tokens based on (see claim 13), in part, timing cues of the first statement (C.6.lines 1-4, C.9.lines 54-56-his "time-out" as timing cue-processing ensues, i.e. parsing, etc.).

As per **claim 22**, Morin teaches a human-machine communication method, comprising:

receiving a first statement in a natural language from a user Fig. 3 "Paint omega, C.3.lines 8, 9;

generating first information based on the first statement (C.3.lines 43-51-stored grammars, his grammars are used for "text and ... input", the Examiner interprets this grammar for all inputs, first or second, all inputs are associated with this grammar or information);

storing context information in a system state memory that is a function of the first information (C.3.lines 11-15);

generating a database query that is a function of the first information (Fig 3. "in which color", Fig. 5 "Are you sure" or "Who should I call", Fig. 1 "task dialogue database");

generating database output that is a function of the database query (ibid-output thereof);

generating second information that is a function of the database output and the stored context information (C.4.lines 5-16-his "prediction" information generated);

storing an expectation in the system state memory that is representative of an expected form of a statement from the user (ibid, also C.15.line 66-C.16.line 20-"no" entered, from a list, inherently stored, all possible choices, interpreted as expected, are displayed);

receiving a second statement in a natural language from a user (C.16.lines 8-10, "no alpha" entered); and

utilizing the expectation to comprehend the second statement (ibid-"makes sense").

As per claims 11-20, the dialogue server, in Fig. 1 embodies the method employed in the invention and thus claims 11-20 are rejected with their similar claims above, as well as the server limitations which are in the scope of the invention.



***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 2, 3, and 21 rejected under 35 U.S.C. 103(a) as being unpatentable over Morin in view of Surace et al. (US 6,144,938).

As per **claims 2, 3 and 21**, Morin teaches incorporating content information generated based on the second information into an interface (Fig. 3, C.31-36), and dynamically generating the interface based on the content information (ibid-the interface is acted on "progressively" thereby dynamic generation), but lacks explicitly disclosing the interface as a web page.

However, Surace teaches having a standard interface as a web browser (C.3.lines 59-61). Therefore, at the time of the invention, it would have been obvious to modify Morin with Surace by having the interface as a web browser. The motivation for doing so would have been to dialogue with a user through an appropriate interface (C.3.lines 59-63).

As per claim 21, the dialogue server, in Fig. 1 embodies the method employed in the invention and thus claim 21 is rejected with its similar claims above, as well as the server limitations which are in the scope of the invention.

***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Takebayashi et al. (US 5,577,165) teaches smooth dialogue between a user and machine.
- Nijmam et al. (US 5,745,877) teaches smooth dialogue between a user and machine.
- Bayya et al. (US 5,774,860) teaches memory context dialogue between a human user and a machine.
- Brown et al. (US 5,999,904) teaches timing cues for a user input, including human user dialogue with a machine.
- Rangarajan et al. (US 6,275,225) teaches human user dialogue with a machine, including incorporating content information generated based on information into a web page, and dynamically generating the web page based on the content information.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lamont M. Spooner whose telephone number is 571/272-7613. The examiner can normally be reached on 8:00 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on 571/272-7602. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

lms  
07/27/05

*Donald L. Storm*  
PATENT EXAMINER  
AK 2654